

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested. This Amendment should be entered under Rule 116 because it places this application in condition for allowance.

Claims 1-18 remain pending in the application.

Applicants appreciatively note that claims 9-11 are allowable and are objected to as being dependent upon a rejected base claim. Applicants respectfully request this be held abeyance pending allowance of independent claim 1.

Claims 1-4, 6 -7 and 14 -15 are rejected under 35 U.S.C. 102(b) as being anticipated by *Fillion* et al (US 5,497,003; hereinafter "*Fillion*"). In response, claim 1 have been amended and is believed to be patentable over *Fillion* for the reasons discussed below.

Fillion fails to disclose all of the limitations of claim 1, in particular, "thinning the polymer layer and at least one passive component by nonselective surface treatment" and "removing the support."

Fillion disclose a method for fabricating an IC module substrate which includes material molding around semiconductor chips. *Fillion* mentions mechanical grinding fixture 810 used to grind down the backside of the substrate to a desired thickness (See, column 12, lines 31-39). However, nowhere does *Fillion* mention thinning a passive component together with the polymer layer. In contrast, *Fillion* expressly discloses that the chips would preferably not be thinned (See, for example, column 12, lines 61-67). Therefore, *Fillion* fails to disclose "thinning the polymer layer and at least one passive component by nonselective surface treatment."

In addition, *Fillion* fails to disclose "removing the support." As stated by the Examiner at page 2 line 15 of the Office Action, Figure 1c and column 6, lines 30-41 are pertinent to "removing the support." However, as shown in Figure 1c of *Fillion*, the

adhesive layer 12a and film layer 12b, which should be considered similar as support, are secured at the contact pads side of chip 14. Apparently, the adhesive layer 12a and film layer 12b are not removed.

Base on the aforementioned reasons, *Fillion* fails to disclose all of the claimed limitations of claim 1, in particular, "thinning the polymer layer and at least one passive component by nonselective surface treatment" and "removing the support." Accordingly, the rejection of claim 1 should be withdrawn.

Claims 4 and 6-7 recite additional, important limitations and should be patentable for the reasons discussed above with respect to claim 1 as well as on their own merits.

In addition, Applicants respectfully submit that *Fillion* fails to disclose the limitation of claim 7, because nowhere does *Fillion* mention thinning the passive component.

As for independent claim 14, Applicants respectfully submit that *Fillion* at least fails to disclose the limitations of claim 14, "a second face, wherein said second face of each of the passive components is polished, and each passive component has a thinned thickness so as to form a plane surface homogeneous with said plane surface of the polymer layer." As discussed above, nowhere does *Fillion* disclose thinning a passive component, and *Fillion* expressly discloses that the chips would preferably not be thinned (See, for example, column 12, lines 61-67). Accordingly, *Fillion* fails to disclose all of the limitations of claim 14 and the rejection of claim 14 should be withdrawn.

Claim 15 recites additional, important limitations and should be patentable for the reasons discussed above with respect to claim 14 as well as on its own merits.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Fillion*. Applicant respectfully traverses this rejection. Claims 2 and 3 recite additional, important limitations and should be patentable for the reasons discussed above with respect to claim 1 as well as on their own merits.

In addition, Applicants respectfully disagree with the Examiner's opinion. As stated by the Examiner, "it would have been obvious to one of ordinary skill in the art to perform a step of rectifying and pre-thinning step..." (Page 5, lines 5-8) It appears that the Examiner

fails to provide factual evidence based upon common knowledge in the art. Therefore, Applicants hereby respectfully request a proper Official Notice and factual evidence indicating the “step of rectifying and pre-thinning”, as recited in claims 2 and 3, being within the domain of common knowledge, as set forth in MPEP 2144.03.

Claims 5, 12 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Fillion* and further in view of *Nakamura et al.* (US Pcb 2002/0151103 A1; hereinafter “*Nakamura*”). Applicants respectfully traverse this rejection.

Claims 5 and 12 recite additional, important limitations and should be patentable for the reasons discussed above with respect to claim 1 as well as on their own merits.

In addition, Applicants respectfully submit that *Nakamura* fails to cure the deficiency of *Fillion*, because *Nakamura* does not teach or suggest thinning a passive component by surface treatment.

Claim 16 recites additional, important limitations and should be patentable for the reasons discussed above with respect to claim 14 as well as on its own merits.

As for independent claim 17, Applicants respectfully submit that claim 17 is patentable over *Fillion* and *Nakamura*, at least because both *Fillion* and *Nakamura* fails to disclose “thinning the polymer layer and the passive components by nonselective surface treatment.” As discussed above, nowhere does *Fillion* disclose thinning a passive component, and *Fillion* expressly discloses that the chips would preferably not be thinned (See, for example, column 12, lines 61-67). *Nakamura* similarly fails to teach or suggest thinning a passive component by surface treatment. Therefore, even if *Fillion* and *Nakamura* can be properly combined, the combination of *Fillion* and *Nakamura* fails to teach or suggest all of the limitations of claim 17. Accordingly, the obviousness rejection of claim 17 should be withdrawn.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Fillion* and *Nakamura* and further in view of Applicants' disclosure. Applicants respectfully traverse this rejection. Claim 13 recites additional, important limitations and should be patentable for the reasons discussed above with respect to claim 1 as well as on its own merits.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Fillion* and further in view of *Hirano et al.* (US Pub 2003/0222335A1; hereinafter "*Hirano*"). Applicants respectfully traverse this rejection. Claim 8 recites additional, important limitations and should be patentable for the reasons discussed above with respect to claim 1 as well as on its own merits.

In addition, Applicants respectfully submit that *Fillion* and *Hirano* both fails to teach or suggest the limitation of claim 8, "thinning one of said ceramic zones in a plane parallel to the electrodes." As discussed above, nowhere does *Fillion* disclose thinning a passive component, and *Fillion* expressly discloses that the chips would preferably not be thinned (See, for example, column 12, lines 61-67). *Hirano* discloses a circuit component package having shrunk end portions. Nowhere does *Hirano* teach or suggest "thinning one of said ceramic zones in a plane parallel to the electrodes." In fact, the package, as disclosed by *Hirano*, is not shrunk in a plane, only the end portions are thinner than that of the center portion, due to a difference in shrinkage ratios upon the sintering (Paragraph [0093]). Also as shown in Figures 3A-3E of *Hirano*, the central portion of the package is parallel to the electrodes but not thinned, and the end portions are thinned but being slanted.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Fillion* and *Nakamura* further in view of *Oka et al.* (US 6,441,495B1; hereinafter "*Oka*"). Applicants respectfully traverse this rejection. Claim 18 recites additional, important limitations and should be patentable for the reasons discussed above with respect to claim 17 as well as on its own merits.

All objections and rejections having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice to that effect is earnestly solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in cursive script, reading "Kenneth M. Berner".

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